

## Request for Quote (RFQ) for Modified Analysis

Date: July 17, 2012

**Subject:** Modification Reference Number: xxxx.0  
Title: ICP-MS plus Thorium and Uranium  
Sample Matrix: Water  
Method Affected: ICP-MS  
Statement of Work: ISM01.3

**Purpose:**

The Contractor Laboratory is requested to perform the following modified analyses under the Inorganic Statement of Work (SOW) ISM01.3, based on the additional specifications listed below. Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in SOW ISM01.3 remain unchanged and in full force and effect. The number of samples requested in this modification is not guaranteed.

*Please note that accepting a modified analysis request is voluntary, and that the Laboratory is not required to accept the modified analysis. There will be no adverse effect to the Laboratory for not accepting the modified analysis request. However, once the Laboratory accepts the request for modified analysis, it shall perform the analysis in accordance with this modification and as specified in SOW ISM01.3.*

The Laboratory is requested to review the modification described herein, determine whether or not it shall accept the requested modified analyses, and complete the attached response form. The Laboratory shall provide comments in response to the required changes in the designated area, in order to ensure that the modified analysis can be completed in accordance with the specifications described herein.

### **Modification to the SOW Specifications:**

The contract Laboratory shall analyze water/aqueous samples for the Target Analyte List (Cd, Cr, As, Cu, Pb, Ni, Se, Tl, Sb) and the additional analytes Thorium (Th, CASRN 7440-29-1), and Uranium (U, CASRN 7440-61-1) by ICP-MS as indicated on the Traffic Report/Chain of Custody Record.

The Contract Required Quantitation Limits (CRQLs) for the following analytes and matrices have been modified. All other CRQLs remain at the level specified in the SOW.

<b>Analyte</b>	<b>Aqueous CRQL (µg/L)</b>	<b>Aqueous Spike level (µg/L)</b>
Thorium	1.0	100
Uranium	1.0	100

Some samples may be received at a reduced volume, less than 100ml but greater than 50ml.

As part of the bid process, the Laboratory shall provide Method Detection Limits for Thorium and Uranium, all masses that will be monitored and all masses that will be used for quantitation. The Laboratory shall also provide all corrections that will be applied to the data to handle interferences and used to generate the final corrected instrument result.

The Laboratory shall:

- Perform the Initial Calibration with a non-blank standard at the CRQL for all analytes.
- Add Th and U to the ICV and CCV at appropriate mid-range concentrations.
- Evaluate the ICB and CCB against the (modified) aqueous CRQLs.
- Perform the Matrix Spike at the levels specified above. Post-digestion spike requirements are per the SOW.
- Add Th and U to the LCS at 2 times the modified CRQLs.
- Add Th and U to Forms 1, 2A, 3, 4B, 5A (5B), 6, 7, 8, 9, 11, 13, and 16.

The acceptance criterion for the initial calibration correlation coefficient is modified to  $r \geq 0.998$ .

The Laboratory shall re-analyze the low-level (at CRQL) calibration standard at the end of the run. The Percent Difference between the true value and the measured value shall be within  $\pm 30\%$ .

The CCV and CCB shall be analyzed after every 10 analytical samples.

The Laboratory is not required to add Th or U to the ICSA/ICSAB solutions. The Laboratory shall use a true value of zero (0) and acceptance windows of  $\pm 2 \times$  the modified aqueous CRQL unless a non-zero value has been determined for the solutions.

The Laboratory is not required to bracket Th or U with an internal standard having a mass greater than 238. The analysis of the Bismuth internal standard at mass 209 is sufficient.

**Reporting Requirements:**

Hardcopy and electronic data reporting are required as specified per SOW ISM01.3. All hardcopy and electronic data shall be adjusted to incorporate modified specifications. This includes attaching a copy of the requirements for modified analysis to the SDG Narrative. If specific problems occur with incorporation of the modified analysis into the hardcopy and/or electronic deliverable, the Laboratory shall contact the DASS Manager within the Sample Management Office (SMO) at (703) 818-4233 or via email at CCSSUPPORT@fedcsc.com for resolution.

All samples analyzed for the same fraction within an SDG must be analyzed under the same fractional requirements. The Laboratory shall not include data for the same fraction with different requirements in the same SDG.

**The Laboratory shall include the Modification Reference Number xxxx.0 on each hardcopy data form under the “Mod. Ref. No:” header appearing on each form as well as the SamplePlusMethod/ClientMethodModificationID element of the electronic deliverable. The Laboratory shall also document the Modification Reference Number and Solicitation Number on the SDG Coversheet and SDG Narrative.**

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**Clarifications/Revisions to the RFQ for Modified Analysis:**

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**Laboratory Name:**

**Laboratory Comments:**